

CMX
B

lining the first trench with dielectric material;
substantially filling the first trench with conductive material to form a gate electrode of the field effect transistor;
forming a body region having a second conductivity type in the substrate;
forming a source region having the first conductivity type inside the body region and adjacent to the first trench;
forming a second trench adjacent to said source region, the second trench defined by sidewalls extending into the body region and a bottom, which terminates below the source region and in contact with the body region; and
filling the second trench with high conductivity material for making contact to the body region.

Please cancel claims 4, 5 and 9-11. /

Please amend claim 13 as follows:

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C2

13. (Once Amended) A process for manufacturing a trench field effect transistor comprising the steps of:
etching a first trench in a substrate having a first conductivity type;
lining the first trench with a layer of dielectric material;
substantially filling the trench with polysilicon;
implanting impurities of a second conductivity type into the substrate to form a body region having the second conductivity type over the substrate;
implanting impurities of the first conductivity type inside the body region to form a source region adjacent to the first trench;
etching a second trench through the source region and into the body region, the second trench defined by sidewalls and a bottom, which terminates in contact with the body region; and
filling the second trench with metal making contact with both the source region and the body region.

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Please cancel claims 16 and 17.